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Washington, W.C., 20554
In the motter of closed Captioning and
Video Descriptions of Video Programming
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CC Wocket Mo. 95-176

Dear Sin:

It is my means of Communicationg

with your office by writing this little concering

the matter of closed captioning and Video

Decription of Video programming. Thy

hurband and I are deaf.

are not statisfied with local IV. broadcast and Cable services not enough chose captioning and many times not showing close captioning on TV screens when programs available with CC.

Very Truly yours_ Peggy Print

2930 Carolyn Dr. Durham , N.C., 27703 March. 11, 1996

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MAR 1 4 1996 March 11 1996

> Federal Communication Commission Office of the Secretary Room 222 1919 M Street N.W. Washington, DC 20554

DOCKET FILE COPY ORIGINAL

Docket #95-176

Dear Mr. Caton:

We need all TV stations, especially ABC, CBS, NBC and all local newscasts be captioned for personal interests and information. It is frustrating to watch a local newscast and miss the "live" news which is equally as crucial to a deaf individual as to an hearing individual.

During weather forecasts there is **no** captioning which leaves us with lots of guesswork on weather outcomes. We pay taxes as same as other American taxpayers. The closed captions not only helps the Deaf people but helps hearing people and foreign-born Americans as well, to increase their reading literacy skills. We hope these things will happen in the near future.

With respects,

Isaac and Randi Pakula 3519-B Merrills' Park Drive

Wilson, NC 27896

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UNIVERSITY

GALLAUDET RESEARCH INSTITUTE TECHNOLOGY ASSESSMENT PROGRAM (202) 651-5257 (202) 651-5476 (FAX) KENDALL GREEN 800 FLORIDA AVE. NE WASHINGTON, DC 20002-3695

March 13, 1996

DOCKET FILE COPY ORIGINAL

Secretary William Caton Federal Communications Commission 1919 M Street, NW Washington, DC 20554

MAR 1 4 1996

Dear Mr. Caton:

Enclosed please find comments of Gallaudet University's Technology Assessment Program in the matter of closed captioning and video description of video programming (CC Docket N. 95-176).

Thank you.

Sincerely,

Judith E. Harkins, Ph.D.

may Hackens

Director

Enclosure

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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20054

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In the Matter of)
Closed Captioning and Video)
Description of Video Programming)

Comments of the

CC Docket N. 95-176

Technology Assessment Program, Gallaudet University

Gallaudet University's Technology Assessment Program conducts studies pertaining to communication accessibility, primarily in the areas of telecommunications, education, and captioning. These comments center observations made in the course of conducting our research. We fully endorse the comments of the National Association of the Deaf, the Consumer Action Network, and the American Foundation for the Blind.

The FCC is to be commended for opening this area of inquiry. Closed captioning was recognized by the Commission on Education of the Deaf (COED) as the most significant technological development benefiting deaf people. The time has come to assure that captioning is an integral part of all televised programming.

Audience for Captioning

In answer to Para.#11, the FCC is sure to receive widely varying estimates from various parties. The most conservative estimate is the number of people who cannot understand speech shouted in an ear. This group of people, considered deaf, is completely reliant on captions, and

numbers 15 million.¹ In addition, hard of hearing people benefit from captioning, as evidenced by the frequent coverage of captioning issues in the publications of Self-Help for Hard of Hearing People (SHHH). The hard of hearing population is quite large, estimated at least 20 million people. The percentage of hard of hearing people using closed captioning is unknown and unknowable.

Hearing loss varies greatly as a function of age. Of people aged 65 and older, 29% have a hearing impairment. People in this age group tend to be averse to "assistive" technologies that accommodate disabilities (such as special equipment for decoding closed captions), because of the cost of the devices and because the use of such technology is an admission of disability. Now that closed caption decoders are present in new televisions, captioning is, in effect, sneaking into the homes of elderly people.

An anecdote to illustrate: Shortly after the TV Decoder Circuitry Act went into effect, this commenter replaced her aunt's television set with a model that had a remote control and captioning capacity. At first, Aunt Mildred did not use the captions. Over the next two years, her hearing level declined. A personal assistant, bothered by the television set's loud volume, turned on the captions one day. At age 80, Aunt Mildred is still a serious sports fan, and was watching a football game at the time. She said, "I didn't realize how much information I was missing. The captions let me get the names, and the statistics, a lot more specific information."

¹Allen, T.E., Holt, J., and Hotto, S. (1994). *Demographic Aspects of Hearing Impairment: Questions and Answers, Third Edition*. www.gallaudet.edu/~cadsweb/

People like Aunt Mildred are discovering captions everyday. Baby Boomers, who are by now familiar with captioning, will be heavy users in the not-too-distant future. In short, whatever the numbers of current viewers are, we can be confident that they are steeply on the rise.

Although it is well known that other audiences benefit from captioning, it will be important to protect captioning as an access feature for deaf and hard of hearing people. Captions for deaf people include information about the audio track (e.g., sound effects, speaker identification, music, laughter, etc.) that hearing people typically do not need, even if they use captions for other reasons. This information about the audio track is important to include as a requirement of captioners.

Captioning and Children

With regard to children, Congress long ago recognized the benefits of captioning for providing access to educational video materials. The Caption Films for the Deaf program was extended to educational videos in 1962. Captioning is also a recognized method of making materials accessible under the Americans with Disabilities Act. These laws have improved the accessibility of video in education, but unfortunately many of the materials shown in education today are still not captioned.

Two years ago Gallaudet University and WGBH² conducted telephone interviews with 175 classroom teachers who have deaf children in their classes. As a visual medium, video is popular among teachers of deaf children. Their estimates indicated that they used video once a week for instruction. But only 26% of those teachers said that all the videos they had shown deaf and hard of hearing students in that academic year were captioned. Ten percent said none of the videos shown had been captioned. When asked about their most recent showing of a video, one-third of the teachers said the video was not captioned.

There are many causes of this problem. Take the famous mini-series *Roots*, which is frequently used as educational material, although it was originally produced for television.

Recently this writer was in the classroom of a New Jersey teacher who wanted to show *Roots* as part of Black History Month. (Some of the deaf African American students in her class were unaware of the existence of slavery.) She obtained the mini-series from a video store, but the videos were not captioned. As it turns out, *Roots* in videotape form is not captioned. The only captioned version available is a 16-mm film version that has to be mail ordered from the distribution project sponsored by the U.S. Department of Education. After ordering in advance (and probably being unable to acquire a copy during Black History Month due to high demand), a teacher would need to acquire a 16-mm projector, and show the series that way before shipping

² This study, "Captioned Media and Educational Technology: Research into Contemporary School Practice," was funded by the Captioning and Adaptation Branch of the Office of Special Education Programs, U.S. Department of Education.

it back. Having found the videotape of *Roots* uncaptioned, this teacher assumed she would not be able to find it in captioned form anywhere. (The 16 mm copies, incidentally, are wearing out from heavy use.)

Furthermore, some distributors and producers will lease the rights to caption and show their videotapes or 16-mm film versions for a limited period of time. This means that sometimes the Department of Education loses titles from its collection-- that is, loses the ability to give deaf children access to educational video material that has already been captioned. The title must be withdrawn because the company refuses to sell the rights for educational purposes, and will not, for any of a number of reasons, renegotiate the lease agreement.

What does this have to do with the NOI? Some of the producers of these videos do televise their productions. In the future, if they are required to caption the production, there is nothing to insure that these captions will transfer to the video form.

Link Captioning and Audio Track

By making a legal link between the audio track of video productions with the captioning "track," the FCC could not only increase the quantity of captioning, but eliminate some of the problems deaf and hard of hearing children have in accessing some educational videos. (Some educational videos will continue to be uncaptioned, if they are never televised and if school districts continue not to demand captioning of video producers.)

It is our opinion that captioning must be retained on all versions of a video product, including digital versions such as CD-ROM.

Captioning during Emergencies

Television has become the American public's primary source of up-to-date emergency information. The FCC has ruled under 73.1250 that broadcasters who break from programming to broadcast emergency information must also provide that information visually as well as in audio form. Sometimes the local station does not view emergency news coverage as a break from programming. The FCC's intent (especially in light of the new P.L. 104-104) should be clarified and strengthened. It is essential to public safety that local television coverage of emergencies be captioned. The decade's rash of natural disasters and, more recently, terrorism has highlighted the large gap between what hearing people can find out in an emergency and what deaf people can find out.

Caption Features and Standards

There have been several studies on captioning features in the past several years. As part of this comment, we append a report of a study of consumer preference, *Caption Features for Indicating Non-Speech Information*, conducted by this department. The report gives guidelines to the captioning industry for captioning "non-speech" information that is necessary for understanding and appreciating the content of a production.

The Commission may wish to address the issue of standards for captioning quality in its ruling. The quality of captioning is much more variable today than it was just a few years ago.

Minimum standards would be helpful in preventing incomprehensible captions. We support the points made about standards in the comments of the Consumer Action Network.

Non-Speech Information in Captioned Video: A Consumer Opinion Study

with Guidelines for the Captioning Industry

By Judith E. Harkins, Ellie Korres, Beth Singer, and Barbara M. Virvan

Technology Assessment Program
Gallaudet Research Institute
Gallaudet University



Gallaudet Research Institute Occasional Paper 95-1
Gallaudet University

Non-Speech Information in Captioned Video: A Consumer Opinion Study

with Guidelines for the Captioning Industry

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Introduction

A floorboard creaks in the hallway of a darkened house. Eerie music begins to play. A woman screams from off camera. A siren wails in the distance.

In television programs and movies, not all information is conveyed through dialogue. In fact, as shown in the example above, a great deal of information can be imparted through sound effects, music, manner of speaking and other kinds of "non-speech information."

Non-speech information (NSI) is a term that describes aspects of the sound track, other than spoken words, that convey information about plot, humor, mood, or the meaning of a spoken passage.

Examples of NSI include:

identification of speaker (off-screen speakers and multiple on-screen speakers) sound effects
music (singing, background music, etc.)
manner of speaking (whispering, emotion, word emphasis, etc.)
audience reaction (laughing, groaning, booing, etc.)
indication of title (books, films, newspapers, plays, etc.)
puns

Many companies in the captioning industry are aware of the role played by this sound-based information, and understand its importance for access by deaf and hard of hearing audiences. However, companies often vary in the ways they portray this information.

A number of tools are used to indicate NSI. Recent changes in decoder circuitry permit caption writers more features for indicating NSI, and with this greater latitude comes the potential for even greater inconsistency among companies. Examples of features that can be used to identify NSI are:

italics/slanted type
placement of the caption near the speaker or sound source
upper/lower case letters
chevrons (>>)
color
music icons
paint-on captions
underlining
quotation marks
explicit description

Guidelines for captioning non-speech information would make it easier for deaf and hard of hearing viewers to follow captions. Toward that end, the Technology Assessment Program at Gallaudet University studied deaf and hard of hearing people's preferences for captioning NSI. The results of the study were used to develop recommended style guidelines to the captioning industry. Draft guidelines were sent to captioning companies for comment, and that input was incorporated into the final guidelines. The purpose of these guidelines is to improve captioning of NSI.

While the vast majority of recommendations in this report are based on a study conducted by the Technology Assessment Program between December, 1992 and May, 1994 some of the recommendations are further bolstered by findings of Cynthia King, Ph.D., and Carol LaSasso, Ph.D., of Gallaudet University's School of Education and Human Services. Both studies were funded by the U.S. Department of Education, Office of Special Education Programs, Captioning and Adaptation Branch. The results of the study apply to Line 21 captioning.

Summary of Methods used in this Study

- ♦ An **advisory committee** composed of consumers and caption industry representatives advised the research staff on all aspects of the study, and reviewed the findings and draft recommendations before they were circulated to the industry for comment.
- ♦ Thirty-three caption writers were interviewed for input as to the challenges they face in representing NSI.
- ♦ Thirty-eight hours of video were analyzed in detail to determine current practice in identifying NSI.
- ♦ Nineteen video clips from television were selected for the data collection videotape, providing 19 different examples of NSI. Emphasis was on NSI identified by the advisory committee and industry as being most important, such as speaker identification.
- ♦ For each of the 19 examples, two or three different ways of captioning to indicate NSI were selected. New uses of captions, incorporating features made possible by updated caption circuitry, were included as well as conventional features such as italics. In all, 55 uses of caption features were included. The order of choices was counterbalanced, to eliminate order effects in preference selection. Note: None of the clips was a real-time captioned segment.
- ◆ Deaf (n = 106) and hard of hearing (n = 83) consumers viewed the videotape and indicated their preference from the choices presented. Respondents were

required to make a choice, and could write comments in addition. If any of the choices were unacceptable, consumers were instructed to mark those choices with an X.

- ◆ Prior to viewing the tape, consumers completed a brief demographic questionnaire, and also answered a questionnaire to determine their awareness and recognition of the meaning of commonly used caption features, such as italics and upper/lower case letters.
- ♦ Results were analyzed and recommendations drafted. These were reviewed by the advisory committee and were circulated in the fall of 1994 to the industry and caption funding agencies for comment.

Summary Results

- ♦ The advisory committee recommended that identification of speaker be the highest priority type of non-speech information studied. The group recommended testing features that are already in use, new features, and even features that were not believed by the investigators to be desirable. Awareness questions were added to the study at the suggestion of the advisory committee.
- ♦ Caption writers welcomed guidelines that are based on consumer-based data.
 Only about half of those interviewed used a stylebook or other written guidelines.
 Caption writers identified numerous problem areas in captioning. Identification of speaker was the NSI that generated most of the challenges for caption writers.
- ♦ The median age of consumer-respondents in this study was 40. Respondents ranged in age from 14 to 84. Sixty-one percent were female, and 39% male. Nineteen percent were members of minority groups. Half had college degrees and half did not. Hearing loss was reported as severe or profound for 70% of respondents. Age at onset of hearing loss was over 20 years of age for 26% of the sample; 52% became deaf at or before three years of age. Ninety-three percent had closed caption decoders in the home at the time of the study.
- ♦ Consumers could not name the functions of commonly used caption features, although such features as italics, upper/lower case, and double chevrons (>>) are very widely used to indicate NSI. Only a minority of consumers gave partially or completely correct responses to an evaluation of awareness of features. This situation may be due to non-standard industry practice and/or the fact that features used are somewhat difficult to interpret if one does not have access to the sound track. This result indicates that caption companies have little to lose by changing the specific features they use in favor of guidelines presented here.

- ♦ Explicit speaker identification (by name) was tested six times in the study.

 Two thirds of respondents chose it more than half of the time, whereas only 3% never preferred it to other features.
- Description was tested seven times. The vast majority of consumers picked description at least half of the time it was offered: 84% chose description four or more times.
- ♦ Unusual uses of caption features (not conventional in the industry at this time) were presented 11 times. Here the preferences were fairly normally distributed; that is, there was no tendency for people automatically to reject new ways of captioning. Specifically, two-thirds of respondents preferred an unusual feature five to seven times out of the 11 examples.
- ♦ Conventional captioning styles--those examples that were captioned as they actually appeared on the air--were presented 11 times. The distribution was somewhat more skewed. Three-quarters of respondents chose the default version one to four times out of 11. This trend was in part due to the fact that the version that aired did not indicate NSI in several cases, and consumers rejected the lack of indication.
- ♦ Color was tested five times. Only 19% chose it more than half the time it was offered. Twice as many--38%--never chose it, and 29% volunteered that it was unacceptable at least once.

Table 1 summarizes guidelines resulting from the project. Table 2 summarizes recommendations regarding features. **Detailed descriptions of the findings leading to these recommendations appear after Tables 1 and 2.**

Summary Table 1 Guidelines for Types of Non-Speech Information

General guideline	If a descriptive caption or feature would in any way clarify or enhance the viewer's awareness of the audio, it should be indicated. Consumers prefer that more of such information be included than is often done in current practice.		
Background music	Background music should be indicated, especially if it contributes to the plot or mood of the video. A description of the background music should be given wherever possible.		
Sound effects	Where feasible, a combination of description and onomatopoeia should be used to indicate sound effects. If space or other limitations do not permit the two to be used together, descriptors should be used. Onomatopoeia should not be used alone. A descriptor is particularly important if the source of the sound effect is not obvious from the video.		
Singing	Continue the practice of using the musical-note icon surrounding the caption. All-caps and upper/lower-case type are equally acceptable for the caption portion.		
Multiple speakers on screen	Where multiple speakers appear on the screen, placement should be used to distinguish among them. Explicit identification should be used in combination with placement if dialogue is fast, if faces are obscured, if characters are moving, or if other circumstances could confuse the viewer. If the character cannot be identified by name, then a descriptor should be provided.		
	An acceptable format for explicit identification is the character's name or descriptor in upper/lower case, surrounded by parentheses, above the caption and left justified with the caption. Minor variations of this format are probably uncontroversial.		
Narrators	Explicitly identify off-screen narrators, rather than using features, such as italics or color, that require the viewer to interpret the feature/code while reading captions.		
Whispered speech	Whispered lines should be identified as such and combined with upper/lower case captions.		

Emphasis of a word or phrase within a caption	Indicate the emphasized word(s) within a caption with italics.	
Titles	Use quotation marks when indicating the title of a book, movie, etc.	
Audience reaction	Audience reaction should be captioned. This is particularly important where the reaction itself becomes part of the plot or comedy. Audience laughter should also be described. (It is of course possible that repeating the descriptor every time the audience laughs, over the length of an entire sitcom episode, would become annoying. This length of exposure was not tested. Therefore, discretion is advised; but audience laughter should be indicated much more often than is now the industry's practice.)	
Conveying emotion	Where strong emotion is conveyed, the emotion should be described with the caption. This feature should be used especially where the strong emotion is not entirely obvious in the facial expression and actions of the speaker. Caption writers may be concerned that this feature could be overused. However, based on consumers' reaction, caption writers should use this feature more than is current practice.	
Accents	Indicate foreign or regional accent with a one-time description at the beginning of the character's lines. (Note: This issue was tested only with a fictional character, and probably should not be generalized to other speakers.)	
Puns	Puns should be briefly explained when feasible.	

Summary Table 2 Guidelines for Features

General Guideline	Consumers have indicated a preference for explicit description or identification over features that assume understanding on the part of the viewer. Examples of such features, requiring interpretation by the viewer, include: use of italics for the entire caption, color, and upper and lower case type without explanation.
Color	Color was not the preferred method of indication in this study, although it was tested in five different circumstances. Color also tested poorly against placement and speaker identification in an earlier study by King and LaSasso (1993). Color is judged unacceptable by more viewers than are many other features. Note that color in real-time captioning (where other options may be problematic) was not tested. (Color in a digital video environment is being studied further by King and LaSasso in 1994-1996).
Flashing	Flashing captions were not preferred in the two applications tested in this study, and were unacceptable to an appreciable minority of respondents. Further study may be warranted of whether or how to use this feature.
Paint-on	Paint-on captions were tested in only one context, and they were not preferred. Further study may be warranted of whether or how to use this feature.
Italics	Italics were less desirable than explicit definition in several contexts. Italics are widely used and should be used less frequently, as their intent is often lost on viewers.
Underline	Underlining was the last choice of respondents in the two applications tested. Further study may be warranted of whether or how to use this feature.
Quotation Marks	Quotation marks were preferred (contrasted with italics and underlining) for indicating a title.

Data Collection Procedures

Data were collected in 28 sessions in the fall of 1993, in seven states on the east coast of the U.S. Respondents were recruited through community groups, schools, and agencies.

Each respondent completed a questionnaire on awareness of caption features. The results of this questionnaire are included in Appendix A. Each respondent also completed a questionnaire on basic demographic information. The results of this questionnaire are included in Appendix B.

Respondents then watched 19 clips of video, each of which was captioned two or three different ways with regard to NSI. Clips ranged in length from 12 to 54 seconds. The order of choices was counterbalanced, to eliminate order effects. The response forms reviewed the feature used in each version of the clip, so that respondents did not have to rely on memory to make a selection.

In deaf groups, the instructions were printed and presented in American Sign Language. In hard of hearing groups, loop amplification was used during the spoken explanation, and print instructions were also provided. The instructions follow:

- ♦ You will see scenes from television shows.
- ♦ Each scene will be shown three times. (A few will be shown only twice.)
- ♦ The scene will be captioned a different way each time.
- You will have an answer sheet for each scene.
- ♦ The answer sheet has three choices, one for each different way of captioning.
- ♦ Please circle the one you prefer; you must choose one.
- ♦ You can cross out any that you think are unacceptable.
- ♦ You may ask questions at any time.
- ♦ Please do not discuss your choices with other people in the room. We want each person's individual opinion, not group opinions.

Data Analysis

Data were entered into a database and analyzed using Statistical Package for the Social Sciences. Frequencies and relative frequencies were obtained for demographic information, awareness questions, and preference questions. Chi-square analysis was conducted to test the hypothesis that the obtained distribution of preferences was different from the statistically expected distribution of preferences — that is, to determine whether the pattern of preferences was not likely to be by chance. Data on preferences were also aggregated across clips to determine the preference or rejection of certain types of features, such as color, description, or new uses of captions.

Results and Recommendations

Speaker Identification

Speaker identification is one of the most important categories of non-speech information, because problems in identifying the speaker are frequent and can cause confusion.

A study by King and LaSasso found support for placing captions near the speaker (King and LaSasso, 1993). In this study, therefore, placement was accepted as a desirable feature, and was kept constant—that is, was used in every version tested.

Off-screen narrator

Off-screen narration was studied in two clips. In one clip tested, there were two off-screen narrators. The second narrator was identified as follows: (1) by explicit identification, (2) by color, and (3) by italicized upper/lower case text. Explicit identification was the rather strong favorite (67%) and was unacceptable to no one. In this clip, color was preferred by 21% and the use of italicized upper/lower text was preferred by only 12%. ($\chi^2 = 96.793$, df = 2, p < .001)

In another clip, the speech was produced by a narrator and a character who sometimes spoke off-screen. Features tested were: (1) explicit identification, (2) color, and (3) italicized caps. Explicit identification was again favored (65%) and found unacceptable by only one person; color was preferred by 19% and capital text with italics by 18%. ($\chi^2 = 83.079$, df = 2, p < .001)

In these two examples, color was unacceptable about as often as it was preferred.

Recommendation: Explicitly identify off-screen narrators, rather than using features, such as italics or color, that require the viewer to interpret the feature/code while reading captions.

Example:

(Female narrator)
THIS IS A GREAT DAY FOR THIS TEAM.

Multiple speakers, on- and off-screen

Features for multiple speakers were tested four times. All features were tested in combination with placement of captions near the speakers.

In one clip, a conversation among three characters included close-ups of the main character's face while the others were speaking. Speakers were identified as follows: (1) by explicit identification, (2) by color, and (3) by the use of double chevrons (>>) before each new speaker--an industry convention in real-time captioning--with placement. Explicit identification was preferred (56%) by the majority of respondents. Color came in second (31%) but was unacceptable to 16%. Chevrons were preferred by only 13%. ($\chi^2 = 51.175$, df = 2, p < .001)

In another clip, all speakers were on screen, but their faces were obscured, making it difficult to identify the speaker visually. Features tested were (1) explicit identification (with placement), (2) color (with placement), and (3) placement without additional features. Explicit identification was preferred by 64% of the respondents, followed by color (23%) and placement alone (13%). ($\chi^2 = 80.222$, df = 2, p < .001)

In a third clip, several characters spoke from off-screen. Three methods of explicit identification were tested: (1) using parentheses around the speaker's name; (2) speaker's name followed by a colon; and (3) brackets around the speaker's name. Preferences were not strong in this case: Parentheses were preferred by more respondents (41%) than were use of a colon (30%) or brackets (29%). Brackets were somewhat more unacceptable (6%) than were parenthesis (2%) or colon (3%). Because the differences were not statistically significant ($\chi^2 = 4.698$, df = 2, p < .10) the results are not used for guidelines.

In the fourth clip, actors re-created a scene based on a recording of an emergency telephone call. Both speakers were off-screen at all times. Features contrasted were (1) speaker identification in combination with placement, all caps; (2) speaker identification combined with all caps and upper/lower case; and (3) placement combined with all caps and upper/lower case but no speaker identification. Again, explicit identification of the speaker was the first choice, but differences in preference were statistically non-significant. [Speaker identification with placement and all capitals was preferred (41%) over upper/lower case text without placement (30%) and over the use of font (caps/upper-lower) (29%) without speaker identification.] Because the differences in preference for this clip were not statistically significant ($\chi^2 = 5.429$, df = 2, p < .10) the results are not used for guidelines.

Recommendation: Where multiple speakers appear on the screen, placement should be used to distinguish among them. Explicit identification should be used, particularly if dialogue is fast, if faces are obscured, if characters are moving, or if other circumstances could confuse the viewer. If the character cannot be identified by name, then a descriptor should be provided.

Recommendation: An acceptable format for explicit identification is the character's name or descriptor in upper/lower case, surrounded by parentheses, above the caption and left justified with the caption. Other formats are probably uncontroversial.

Examples:

```
( Commander )
IN OUR OWN POLICE SHUTTLE.

( Tess )
PLEASE DON'T MAKE ME DO THAT.
```

SPEAKER IDENTIFICATION OFF-SCREEN NARRATOR

In this clip, there are two off-screen narrators.







Features used to indicate speakers:

Speaker ID Narrator:

Color
Narrator in white, second speaker in yellow

<u>Capital letters and italics</u> CAPITAL LETTERS/Slanted letters

<u>Feature</u>	<u>Preferred</u>		<u>Unacceptable</u>
	<u>N</u>	<u>%</u>	<u>N</u> %
Speaker ID	126	67	$\overline{0}$ 0
Color	40	21	36 19
Caps & italics	<u>23</u>	12	<u>10 _5</u>
Totals	189	100	46 24